

ABSTRACT

A pivotally movable member 21 comprising a substrate 22 and a frame-shaped ferromagnetic layer 23 formed on the substrate is located in a magnetic field generated by a permanent magnet 27 at oblique magnetic field position and pivotally movably supported at one end by a pair of torsion hinges 24 while a movable member 31 comprising a substrate 32 and a frame-shaped ferromagnetic layer 33 formed on the substrate 32 is driven by an electrostatic actuator 36, 37 in a direction perpendicular to a pivot axis defined by the torsion hinges 24 to move into a space between the permanent magnet 27 and the pivotally movable member 21, whereby the pivotally movable member 21 is caused to pivot by a repulsive force produced between the pivotally movable member 21 and the movable member 31.